

Mrs. Marlene Dortch,  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, DC 20554

RE: Reply Comments in Response to RM-11681 Petition for Ligado's Request to Allocate the 1675-1680 MHz Band for Terrestrial Mobile Use Shared with Federal Use

Dear Mrs. Dortch:

I am a retired meteorologist and meteorological satellite operator and planner with 41 years of experience in weather forecasting and satellite meteorology in both the military (USAF) and private (Raytheon) sectors. I am also a Fellow of the American Meteorological Society.

In reviewing the submissions from the Urban Libraries Council and from Ligado Networks<sup>1</sup>, there are some additional facts that should be included in this proceeding, regarding how data are broadly distributed to various users.

The Ligado comment discussed their alternative idea in a content delivery network, stating "Ligado's proposed content delivery network would deliver information in a manner that is equal to – if not better than – the quality of the information these users currently receive. Furthermore, the new network would expand access to NOAA data to schools, libraries, and the general public, advancing the Administration's Open Data Initiative and Commission's efforts to bolster science, technology, engineering and math ("STEM") education."

The science data received from GOES is actually already available to schools, libraries and the general public via two existing programs:

- NOAA's Comprehensive Large Array-data Stewardship System (CLASS) which is an electronic library of NOAA environmental data. "CLASS is NOAA's premiere on-line facility for the distribution of NOAA and US Department of Defense (DoD) Polar-orbiting Operational Environmental Satellite (POES) data, NOAA's Geostationary Operational Environmental Satellite (GOES) data, and derived data."<sup>2</sup>

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<sup>1</sup> Submissions to RM-11681, Urban Libraries Council, posted 8/11/2016 and Comments of Ligado Networks, posted June 22, 2016

<sup>2</sup> <http://www.class.ngdc.noaa.gov/saa/products/welcome> and <http://www.class.ngdc.noaa.gov/saa/products/about>

- The educational resources by the University Center for Atmospheric Research (UCAR), such as MetEd (Meteorological Education) or UCAR databases such as “Facilities for Atmospheric and Earth Science Research” (FAESR) contain NOAA satellite data from sensors, open to anyone who registers on their web page<sup>3</sup>.

Furthermore, Dr. Brian Kopp, University of North Florida Asst. Professor, provided an excellent and comprehensive description of NOAA’s already-existing extensive STEM educational programs and capabilities employing GOES data that would be adversely impacted by and made redundant by Ligado’s CDN proposal in his comments to Ligado’s RM-11681 Petition<sup>4</sup>.

The ancillary benefits that Ligado claims for the CDN proposal in terms of access to data for schools, libraries, etc. is no real net gain in benefit, because the data is already available today. Since UCAR collects GOES data via its own private sector satellite receiving station, which would be unlikely to obtain interference protection if the Ligado proposal is accepted, this current access by academics, researchers and public users of their website could be impacted.

I would like to agree with the filing from AccuWeather, which discusses the use of these direct broadcasts for entities performing meteorological forecasts and warnings:

“The radio spectrum under consideration (1675-1680 MHz) is currently utilized for delivery of essential information used to save lives, protect property and ensure the stability of the American economy. The proposal could affect the timely and accurate delivery of this critical information.”<sup>5</sup>

During severe meteorological events, power and internet services have either failed or are taxed to the full extent of their capabilities. Data delivery to the thousands of end users who will require the near-real time data is likely to be unavailable just when having that information is most critical.

I do not recommend that the spectrum proposal by Ligado be implemented. The FCC should oppose the petition to share the radio spectrum in 1675-1680 MHz.

Thank you for allowing me to provide replies to comments in this proceeding.

Sincerely,

Col. Michael L. Jamilkowski, USAF (Retired)

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<sup>3</sup> <http://faesr.ucar.edu>

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